



Statistics on Mining Industries

Introduction

The U.S. decennial census collected the first statistics on mines and mining (as distinguished from persons employed in this field) in this country in 1840 and approximately every 10 years thereafter, through 1940. After 1940, the censuses of mining industries were taken for 1954, 1958, and 1963. Since 1967, mining and minerals establishments have been included in the economic census covering years ending in "2" and "7," as authorized by Title 13 of the United States Code. Title 13 requires response to the census inquiries and also assures that all information provided by companies in response to the census will be kept confidential and published in summary form only. Thus, the U.S. Census Bureau makes certain that no individual firm's operations can be identified in its printed reports or public-use electronic products, and agency employees are subject to heavy penalties for violating the law's confidentiality provisions.

The U.S. Census Bureau collects its data directly from all large firms, usually by mail, and abstracts statistics on employment, payroll, and receipts from federal administrative records for the remaining establishments. Using administrative records relieves many small firms from having to file census returns.

The unit of enumeration for the census is the establishment—generally defined as a single, physical location at which one or more of the following activities takes place: metal mining, coal mining, oil and gas extraction, or mining and quarrying of nonmetallic minerals (except fuels).

The Mining sector of the 1997 Economic Census covered those mining establishments or companies with one or more paid employees. Mining is defined as the extraction of naturally occurring mineral solids, such as coal and ores; liquid materials, such as petroleum; and gases, such as natural gas. The term "mining" is used in the broad sense to include quarrying, well operations, beneficiating (e.g., screening, washing, and floatation), and other preparations customarily performed at the mine site or as part of the mining activity.

The Mining sector distinguishes between two basic activities: mine operation and mining support activities. Mine operations include establishments operating mines, quarries, or oil and gas wells on their own account or for others on a contract or fee basis. Mining support activities include establishments that perform exploration (except geophysical surveying) and/or other mining services on a contract or fee basis.

The North American Industry Classification System (NAICS)

The U.S. Census Bureau introduced the North American Industry Classification System (NAICS) in the 1997 Economic Census, except for the Outlying Areas (i.e., Puerto Rico, Guam, the Virgin Islands, and the Commonwealth of the Northern Mariana Islands), which used the Standard Industrial Classification (SIC) coding system (upon request of the Outlying Areas' governments). The Outlying Areas will implement the NAICS for the 2002 Economic Census. Establishments in the Mining sector—NAICS sector 21—are classified by industry according to the natural

resources mined or to be mined. Included are establishments that develop the mine site, extract the natural resources, and/or those that beneficiate (i.e., prepare) the mineral mined. The operations that take place in beneficiation are primarily mechanical, such as grinding, washing, magnetic separation, and centrifugal separation. The range of preparation activities varies by mineral and the purity of any given ore deposit.

Mining, beneficiation, and manufacturing activities often occur at a single location. Separate receipts are collected for these activities whenever possible. When receipts cannot be broken out between mining and manufacturing, establishments that mine or quarry nonmetallic minerals and beneficiate these nonmetallic minerals into more finished manufactured products are classified based on the primary activity of the establishment.

Hauling and other transportation beyond the mine property and contract hauling (except out of open pits in conjunction with mining) are excluded from this sector. An establishment that mines, but the primary output is a more finished manufactured product, will be classified in Sector 31-33—Manufacturing.

Who Uses Mineral Industries Data

The federal government uses these statistics in calculating the gross domestic product and the Nation's mineral wealth; developing input and output models; planning and evaluating conservation, energy-related, and other legislation;

determining national mineral policies and research and development projects; and administering mineral industry programs. State and local governments are interested in the economic and fiscal effects of mining industries within their jurisdictions. Nongovernment users in schools of mines and research institutions, and in manufacturing, finance, transportation, and other fields employ these data in planning and forecasting.

Trade associations and mining firms themselves use U.S. Census Bureau tabulations to evaluate their own operations with respect to their industry and geographic areas.

What Data Are Available

Economic Censuses

Following the 1997 Economic Census, the published reports for the Mining sector consisted of a series of 29 industry reports and 51 geographic area reports, each of which provides statistics for individual industries, states, or offshore areas. Also included for this sector are the General, Product, and Materials Summary reports, and data files on Location of Mining Operations.

- **Industry Reports.** Each industry report presents data for a six-digit NAICS industry. These reports include such statistics as number of establishments, employment, payroll, value added by mining, cost of supplies used, value of shipments and receipts, capital expenditures, etc., for each mining industry. The industry reports also include data, by state, for establishments with 100 or more employees.

The following mining *Industry Series Reports* were available following the 1997 Economic Census:

- *Crude Petroleum and Natural Gas Extraction (EC97N-2111A)*
- *Natural Gas Liquid Extraction (EC97N-2111B)*
- *Bituminous Coal and Lignite Surface Mining (EC97N-2121A)*
- *Bituminous Coal and Underground Mining (EC97N-2121B)*
- *Anthracite Mining (EC97N-2121C)*

- *Iron Ore Mining (EC97N-2122A)*
- *Gold Ore Mining (EC97N-2122B)*
- *Silver Ore Mining (EC97N-2122C)*
- *Lead Ore and Zinc Ore Mining (EC97N-2122D)*
- *Copper Ore and Nickel Ore Mining (EC97N-2122E)*
- *Uranium-Radium-Vanadium Ore Mining (EC97N-2122F)*
- *All Other Metal Ore Mining (EC97N2122G)*
- *Dimension Stone Mining and Quarrying (EC97N-2123A)*
- *Crushed and Broken Limestone Mining and Quarrying (EC97N2123B)*
- *Crushed and Broken Granite Mining and Quarrying (EC97N-2123C)*
- *Other Crushed and Broken Stone Mining and Quarrying (EC97N2123D)*
- *Construction Sand and Gravel Mining (EC97N-2123E)*
- *Industrial Sand Mining (EC97N2123F)*
- *Kaolin and Ball Clay Mining (EC97N-2123G)*
- *Clay and Ceramic and Refractory Minerals Mining (EC97N-2123H)*
- *Potash, Soda, and Borate Mineral Mining (EC97N-2123I)*
- *Phosphate Rock Mining (EC97N2123J)*
- *Other Chemical and Fertilizer Mineral Mining (EC97N-2123K)*
- *All Other Nonmetallic Mineral Mining (EC97N-2123L)*
- *Drilling Oil and Gas Wells (EC97N2131A)*
- *Support Activities for Oil and Gas Operations (EC97N-2131B)*
- *Support Activities for Coal Mining (EC97N-2131C)*
- *Support Activities for Metal Mining (EC97N-2131D)*
- *Support Activities for Nonmetallic Minerals (Except Fuels) (EC97N-2131E)*
- **State Reports.** State reports present statistics similar to those found in the *Industry Series Reports*, at the sector-level for each state, the District of Columbia, and the offshore areas (the District of Columbia and Delaware are combined in a single report). No substate data are available. The state reports also include data for industries with 100 employees or more in the state.

Data for offshore areas that are part of Alaska, California, Louisiana, and Texas are in their respective state area reports and represent offshore operations on all these state offshore leases and all federal offshore leases defined by their state plane coordinate systems. State offshore areas are defined as that area extending from the coastline up to three geographic miles distance, except for Texas and Florida, which extend three marine leagues from the coastline in the Gulf of Mexico. Data for offshore areas not associated with a state are in the *Offshore Areas* geographic report.

- **Offshore Areas.** This report presents data comparable to that in the *State Reports* for the offshore areas associated with the individual offshore area *State Reports*, but are not part of a state territory. These areas are those conducted beyond three geographic miles from the state coastline. Offshore areas not associated with Texas and Florida are beyond three marine leagues (nine nautical miles) from the coastline.

The *Offshore Areas* geographic report is broken down into three "regions" as follows:

- **Atlantic Offshore**—Atlantic Federal Area, New Hampshire, Maine, Massachusetts, Connecticut, New York, New Jersey, Delaware, Maryland, Virginia, North Carolina, South Carolina, Georgia, and Florida (Atlantic).
- **Northern Gulf of Mexico Offshore**—Northern Gulf of Mexico Federal Areas defined by Universal Transverse Mercator Coordinates System (including areas generally south of the state plane coordinates systems of Texas and Louisiana), Mississippi, Alabama, and Florida (Gulf of Mexico).

- Pacific Offshore—Pacific Federal Areas defined by the Universal Transverse Mercator Coordinate System, Oregon, and the state of Washington.
- *General Summary.* This report contains industry and geographic area statistics summarized in one report. It includes higher levels of aggregation than the industry and state reports, as well as revisions to the data made after the release of the industry and state reports.
- *Product Summary and Materials Summary.* These reports summarize the products, materials, and fuels data published in the industry series reports.
- *Location of Mining Operations.* These data files include statistics on the number of establishments by three- and six-digit NAICS industry for each state and offshore area, by employment size of the establishment.

Other Aids and Sources of Data

- *Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations.* This report offers aggregated quarterly statistics for the Nation on the financial position of domestic corporations. These statistics include estimated statements of income and retained earnings, balance sheets, and related operating ratios by industry classification and asset size.
- *County Business Patterns.* This is an annual series that covers most of the Nation's economic activity. Data are provided for the following NAICS economic sectors:
 - Forestry, Fishing, Hunting, and Agriculture Support.
 - Mining.
 - Utilities.
 - Construction.
 - Manufacturing.
 - Wholesale Trade.
 - Retail Trade.
 - Transportation and Warehousing.
 - Information.
 - Finance and Insurance.
- Real Estate and Rental and Leasing.
- Professional, Scientific, and Technical Services.
- Management of Companies and Enterprises.
- Administrative and Support and Waste Management and Remediation Services.
- Education Services.
- Health Care and Social Assistance.
- Arts, Entertainment, and Recreation.
- Accommodation and Foodservices.
- Other Services (Except Public Administration).

The series is useful for studying the economic activity of small areas; analyzing economic changes over time; and as a benchmark for statistical series, surveys, and databases between economic censuses. The series serves various businesses, allows them to analyze market potential, measure the effectiveness of sales and advertising programs, set sales quotas, and develop budgets. The data also are used by government agencies for administration and planning.

Census and survey data also appear in trade journals, textbooks, and other secondary sources.

Additional information on the methodology, procedures, and history of the economic censuses is published in the *History of the 1997 Economic Census* available online at (www.census.gov/econ/www/history.html).

- U.S. Census Bureau data are used in the administration and legislation of several federal agencies. For more information on the mining industry, examples of mining related programs and legislation, and/or to download publications using U.S. Census Bureau Mining sector data, visit the Environmental Protection Agency (www.epa.gov) or the agencies within the U.S. Department of Interior (www.doi.gov)—Bureau of Land Management, Office of Surface Mining, Minerals Management Service—and many other federal government agency Web sites.

Data Availability

U.S. Census Bureau data are available from more than 1,400 government and U.S. Census Bureau depository libraries across the country. These depositories consist primarily of college and university libraries. Many smaller libraries also maintain collections of census publications. In addition to depository libraries, data may be accessed from the following:

- Business and Industry Data Centers (BIDCs). These data centers are the result of a U.S. Census Bureau pilot project launched in 1988. The U.S. Census Bureau and other federal government agencies furnish economic data and related assistance and training to aid a number of BIDCs in furthering economic development in their states.
- All of the states, plus the District of Columbia, Puerto Rico, Guam, and the Virgin Islands of the United States have Census State Data Centers that assist the public with

printed and electronic census data. Some states also have business and industry data centers, which specialize in economic data.

- A network of Regional Data Centers (RDCs) and the Suitland, MD, research facility offer qualified researchers restricted access, in secure environments, to data collected by the U.S. Census Bureau's surveys and censuses that are not included within the agency's publication program. Researchers must submit research proposals to the RDCs and the U.S. Census Bureau for review and approval. Upon approval, researchers are subject to the confidentiality restrictions of Title 13, United States Code-Census.

How the Data Are Published

Most of the economic census Mining sector statistics are issued on CD-ROM, and online through the U.S. Census Bureau's American FactFinder® and in Portable Document Format (PDF) at www.census.gov/prod www/abs factfind.html. Printed products may be ordered by mail, telephone, and the Internet from—

Superintendent of Documents
U.S. Government Printing Office
P.O. Box 371954
Pittsburgh, PA 15250-7954
Telephone: 202-512-1800
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Electronic products may be purchased by mail from—

U.S. Department of Commerce
U.S. Census Bureau (MS1921)
P.O. Box 277943
Atlanta, GA 30384-7943

Electronic products may be ordered by telephone or fax from—

Marketing Services Office
Customer Services Branch
U.S. Census Bureau
Washington, DC 20233
Telephone: 301-763-INFO (4636)
Fax: 888-249-7295 or
301-457-3842

The Customer Services Branch can print and bind any PDF report on demand, priced at \$25 or more per report, depending upon the number of pages. (A list of reports, with page counts, is available via the U.S. Census Bureau's Internet site (www.census.gov), in the Economic Census section of the *Catalog: Publications*.)

Factfinder for the Nation

General information about the U.S. Census Bureau's various statistical programs is contained in the publications of the *Factfinder for the Nation*. Inquiries and suggestions about the mining statistics program and other U.S. Census Bureau activities are invited. Write to—

U.S. Census Bureau
Office of the Director
Washington, DC 20233